



GLAST Monthly PSR

LAT Instrument

B. Graf
Instrument Manager
- 1



Accomplishments



- **Tracker**

- *Proceeding with production of flight trays; first article trays (etched and primed) show adequate bond*
- *Decision to eliminate wire bond (silicon to MCM) encapsulation*
- *Assembled "Tower 0"; nineteen trays all but six are non flight; successfully operating full tower*
- *342 MCMs delivered to SLAC; 608 needed for flight with 241 through burn-in at SLAC*
 - .. *Novocap resolved* .. *Pitch adapter in work* .. *conformal coat revised spec in review*
 - .. *HV Shorts resolution in work* .. *data read-back errors being investigated*

- **Calorimeter**

- *CAL FM 101 (FMA) Complete Assembly – delivery early November*
 - .. *muon performance good*
 - .. *EMI/EMC testing complete, no issues*
 - .. *Vibration complete (Proto-flight levels), no issues*
 - .. *In thermal vacuum chamber*
- *CAL FM 102 (FMB) AFEE board installation complete – delivery early December*

- **Electronics**

- *Started TEM/TPS assembly and test vender – Qual+2 12/1/04*
- *All GTCC and GCCC TEM ASIC screened*
- *Test bed hardware complete and connectivity verified (TEMs, GASU, PDU, FES)*



ACCOMPLISHMENTS (con't)

- PCB meeting each week

- **ACD**

- *Completed assembly and functional testing of two single row electronics chassis w/o PMTs*
- *Resolved fiber ribbon anomalies (length discrepancies, vents) and installed on flight structure*
- *Began installation of TDAs on flight structure*
- *Completed thermal cycling, vibration, and two TVAC cycles on ten spring mounted PMTs.*
- *Completed assembly of twenty more PMTs for qualification testing*
- *Completed all flight FREE boards, clear fiber cables, and TDAs*

- **Mechanical Systems**

- *GRID # 1 nickel plating complete*
- *GRID # 2 finish machining 80% complete*
- *LM delivered Top Flange and Downspout heat pipes to SLAC*

Monthly Status Review – October 27, 2004

NASA/DOE Review - October 12, 2004

Sub-System Managers Face to Face – October 13, 2004

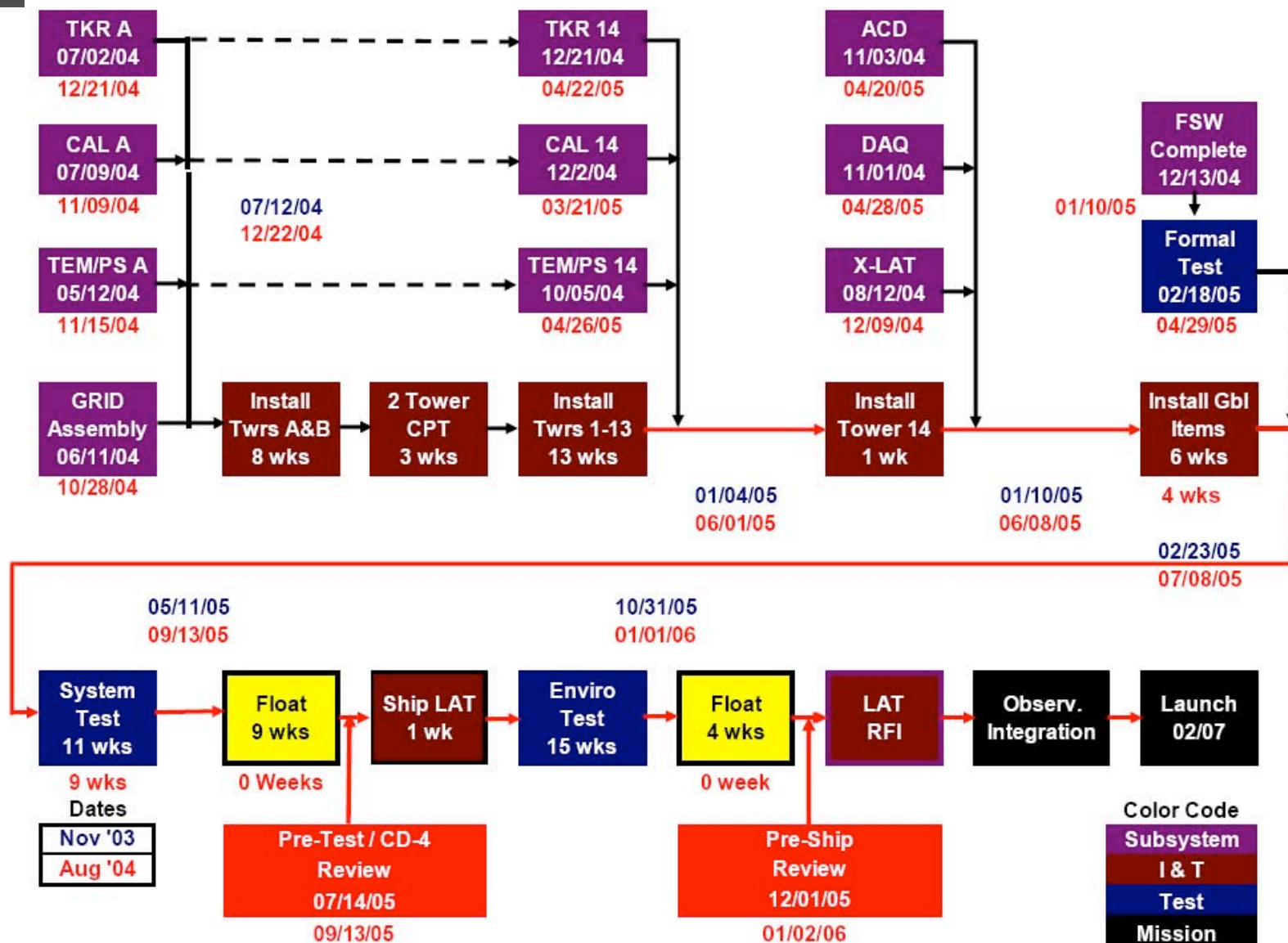
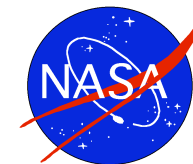


Issues/Problems

- ▶ ***SCHEDULE - SCHEDULE - SCHEDULE***
- ▶ ***Tracker Flex Cable***
- ▶ ***MCMs***
- ▶ ***ASIC ESD Sensitivity***
- ▶ ***Delivery of GRID #1 to I&T***
- ▶ ***TEM/TPS Readiness for flight build***



LAT Schedule





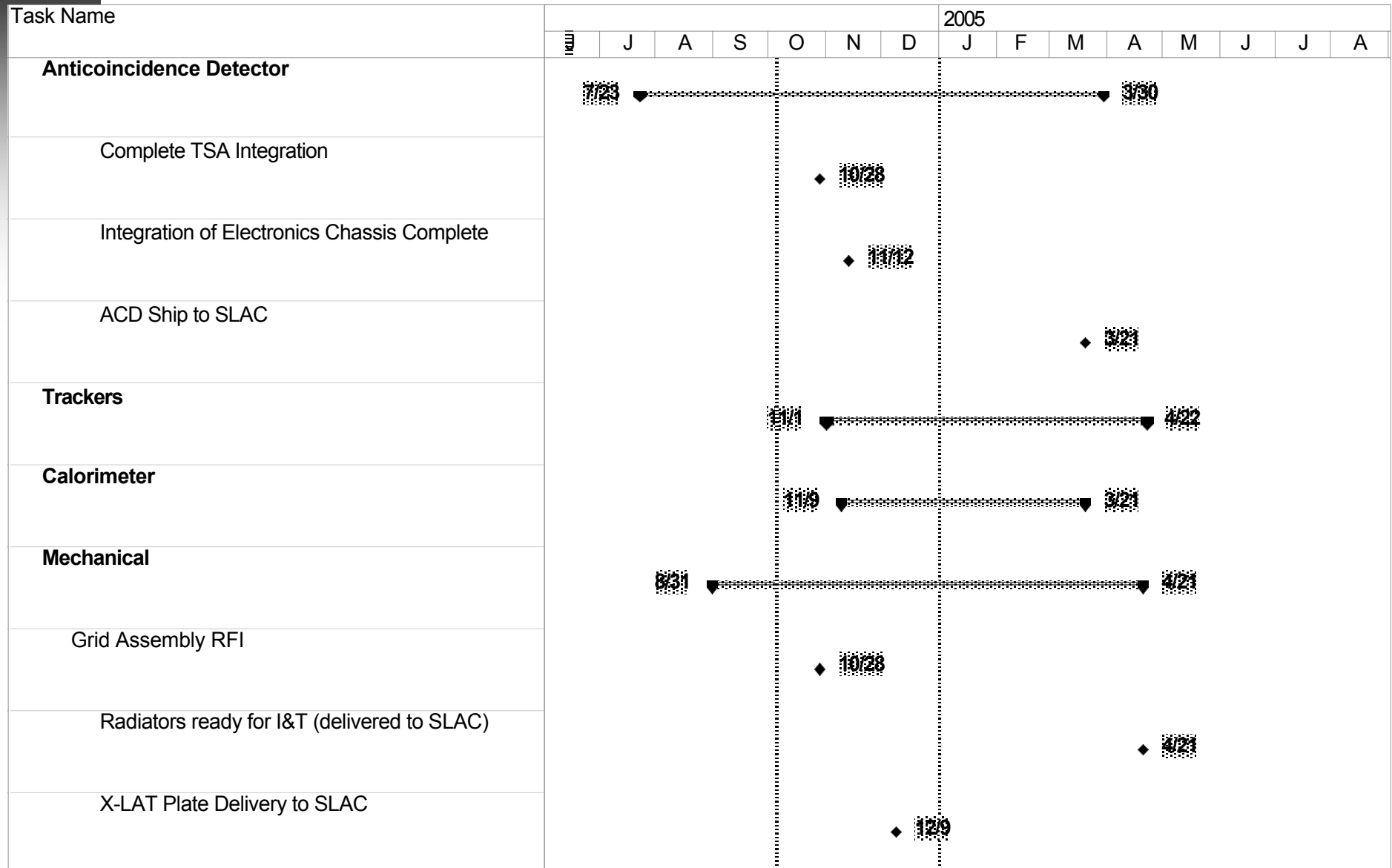
LAT Missed Milestones



Milestone	Due Date
TKR FM A Electrical Test	9/10/04
TKR Protoflight A Environmental Test	9/17/04
Flight Cable assy 1 to I&T	9/10/04
LAT Integration Readiness Review	9/10/04
Tracker Module A RFI	9/24/04
Flight Grid RFI Mech to I&T	9/15/04
Start LAT Integration	9/20/04

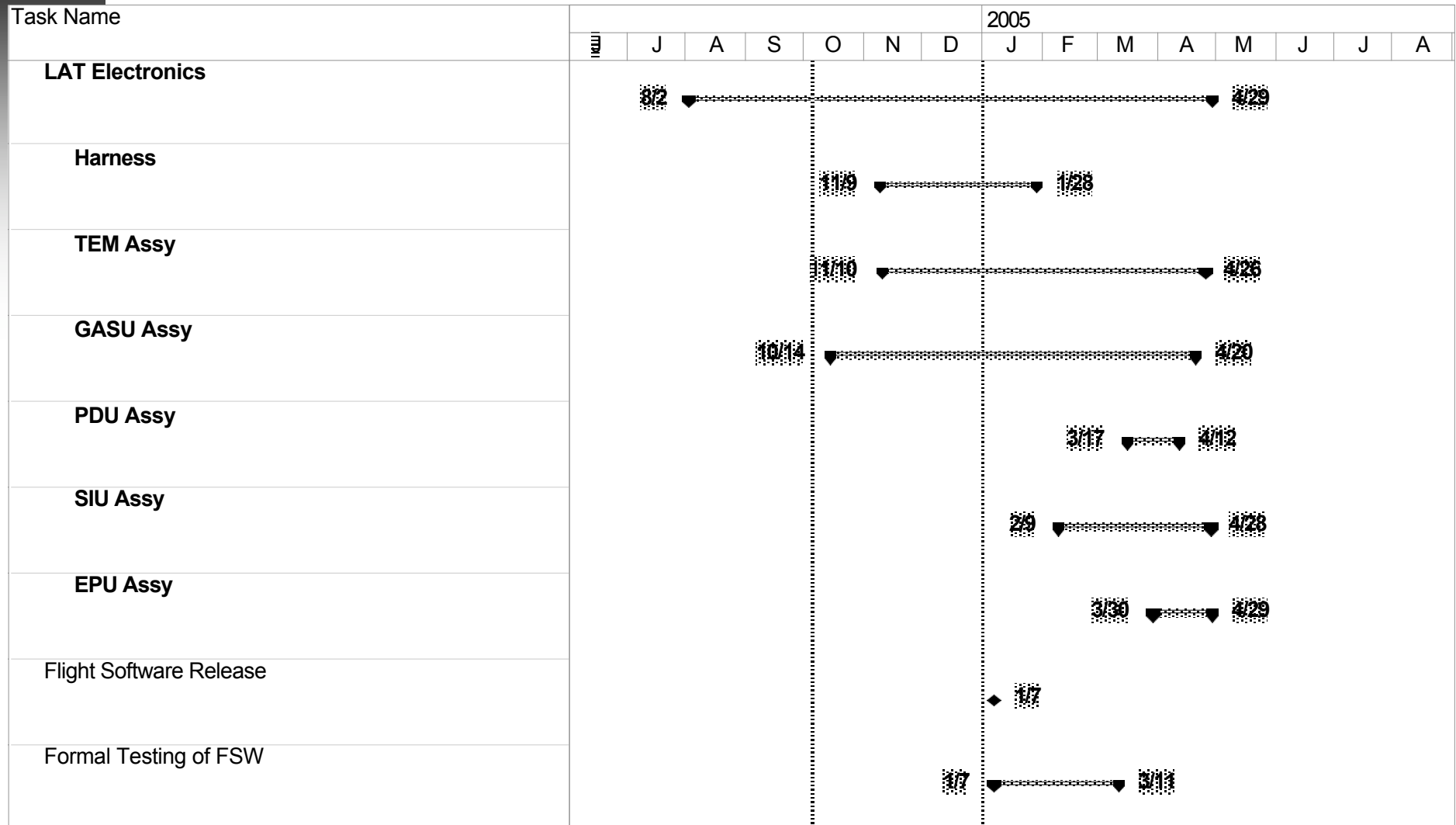


LAT Overview



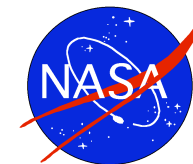


LAT Overview





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Task Name	2005													
	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Tower Integration and Test	12/23 ▼ 6/7 ▼													
Integrate LAT-wide electronics								6/8	6/21					
Optical Survey								6/22	6/22					
Integrate EMI Skirt and Htr Sw. boxes								6/23	6/27					
Optical and Muon Survey								6/28	6/30					
Integrate ACD								7/1	7/6					
Integrate Cross-LAT thermal plate/ Cooling GSE								7/7	7/11					
LAT Optical Survey								7/12	7/12					
Mechanical Fit Checks								7/13	7/14					
Comprehensive Performance test								7/22	8/4					



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